

Supplementary Information

Metal oxide single-component light-powered micromotors for photocatalytic degradation of nitroaromatic pollutants

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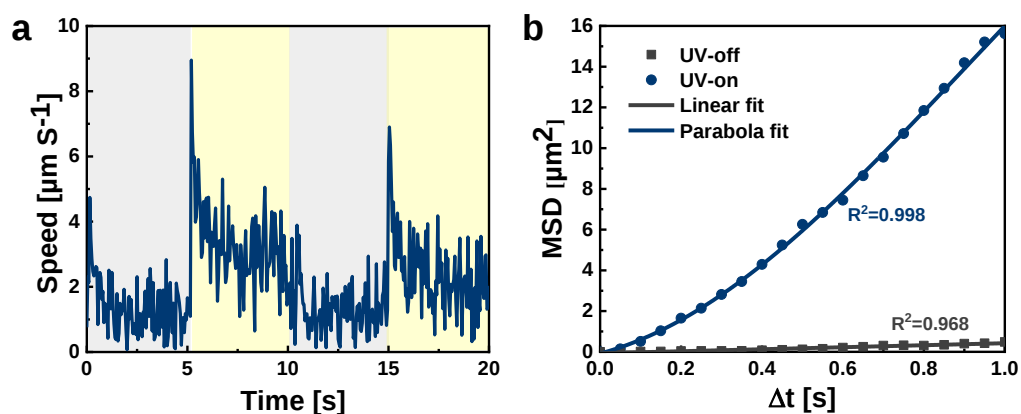
Supplementary Videos 1. The motion behavior of a WO_3 micromotor under UV light

irradiation with on/off response in pure water.

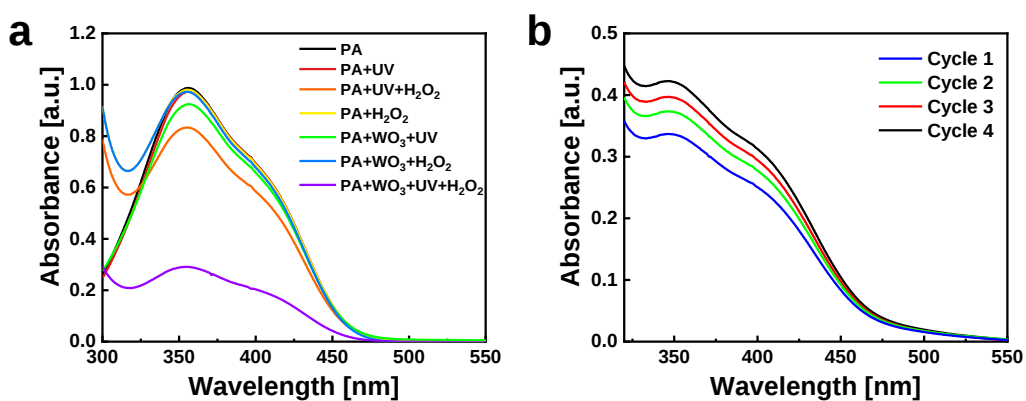
Supplementary Videos 2. The motion behavior of WO_3 micromotors under UV light

irradiation with on/off response in 1% H_2O_2 .

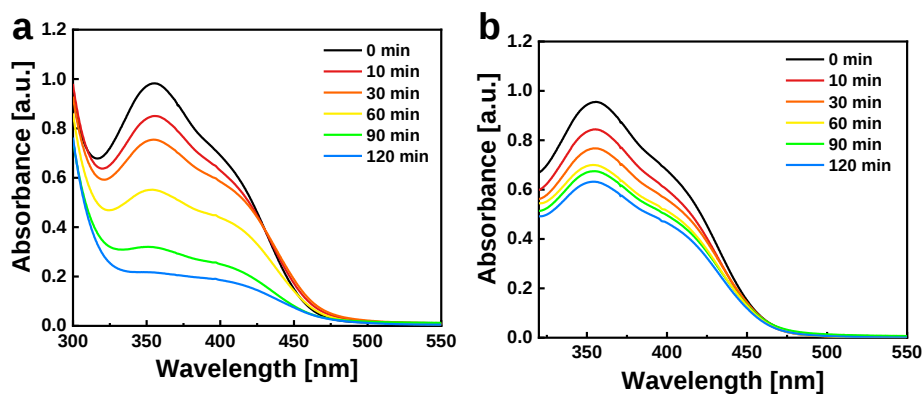
Supplementary Figures



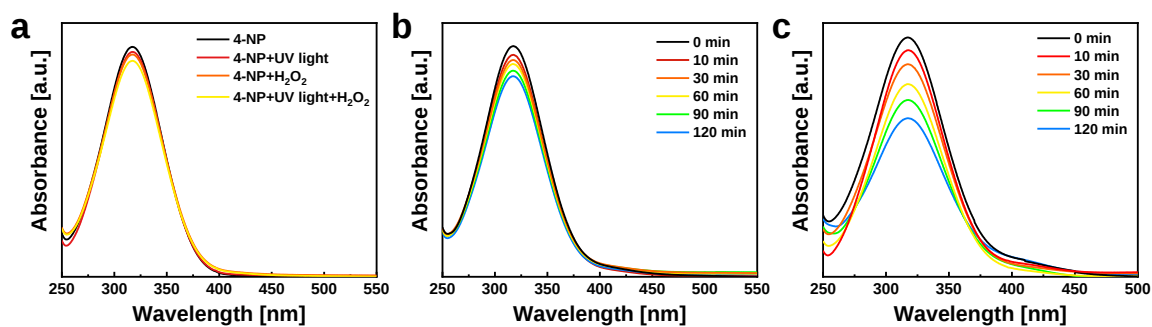
Supplementary Figure 1. **a** Instantaneous speed values and **b** MSD plots of WO_3 micromotors without/with UV-light irradiation in pure water.



Supplementary Figure 2. **a** UV-Vis spectra of PA solutions treated under different conditions for 2 h. **b** UV-Vis spectra of reusability test using WO_3 micromotors under UV-light irradiation in 1% H_2O_2 for 2 h.



Supplementary Figure 3. UV-Vis spectra of PA solution treated with different radical scavengers, **a** EDTA and **b** isopropanol, using WO_3 micromotors under UV-light irradiation in 1% H_2O_2 for 2 h.



Supplementary Figure 4. **a** UV-Vis spectra of 4-NP solutions treated under different conditions for 2 h. UV-Vis spectra of 4-NP solutions using WO_3 micromotors under UV-light irradiation for 2 h **b** in pure water and **c** in 1% H_2O_2 .